DOCUMENT RESUME

ED 333 370 CS 212 659

AUTHOR Collins, Norma; Smith, Carl, Comp.
TITLE Reading in the Content Areas. Learning Package No. 4.
INSTITUTION Indiana Univ., Bloomington. School of Education.
PUB DATE 90
NOTE 41p.; For other learning packages in this series, see CS 212 656-705.
AVAILABLE FROM Learning Packages, ERIC/RCS, Indiana University, Smith Research Center, Suite 150, 2805 E. 10th St., Bloomington, IN 47408-2698 ($14.00).
PUB TYPE Guides - Classroom Use - Teaching Guides (For Teacher) (052) -- Collected Works - General (020)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Content Area Reading; *Content Area Writing; Critical Reading; Distance Education; Higher Education; Inservice Teacher Education; Reading Comprehension; *Reading Strategies; Secondary Education
IDENTIFIERS Text Factors

ABSTRACT

Originally developed for the Department of Defense Schools (DoDDS) system, this learning package on reading in the content areas is designed for teachers who wish to upgrade or expand their teaching skills on their own. The package includes a comprehensive search of the ERIC database; a lecture giving an overview on the topic; the full text of several papers on the topic; copies of any existing ERIC/RCS publications on the topic; a set of guidelines for completing a goal statement, a reaction paper, and an application project; and an evaluation form. (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ERIC/RCS
150 Smith Research Center
Indiana University
Bloomington, IN 47405

Learning Package #4

Reading in the Content Areas

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Dr. Carl Smith
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

OVERVIEW

ERIC/RCS Learning Packages contain just what the practitioner needs for staff development workshops. Workshops can begin with an overview lecture , continue through readings and discussion material, and end with research projects and an annotated bibliography for further research.

Each learning package contains (1) a topic overview: a four-to-six page stage-setter; (2) in most cases, a digest of research: an ERIC summary of research on the topic written by a specialist; (3) a goal statement and a survey form; and (4) an extensive annotated bibliography of ERIC references.

Graduate-level university credit is available. For further information contact Indiana University School of Continuing Studies, Owen Hall #204, Bloomington, Indiana 47405. Enrollment in each course will be limited.

READING IN THE CONTENT AREAS

by Norma Collins

(Lecture)

Much of the material on this tape is drawn from the work of Richard and Jo Anne Vacca, authors of the book Content Area Reading. (See bibliography.) Vacca and Vacca operate upon the premise that reading development is a lifelong activity. The authors define reading as an active process of meaning construction.

Because reading is seen as a language process, an important interaction exists among the reader, the writer, and the text. This three-way relationship acknowledges the role of background knowledge on the part of the reader, cues given to the reader from the author, and the importance of organizational features of the text. Each of these will be discussed on the tape to help you understand how they come together to assist students in successful interactions with print.

Often, before we can understand educational theories or stances, we need to examine the assumptions we hold toward them. A basic assumption that frequently underlies reading instruction in the content area is one of resistance. Sometimes, the resistance is linked to a feeling of inadequacy about how to approach reading in a particular subject area; sometimes, there is an impatience with the idea of dealing with reading at the

secondary level when "it should have been taught in the elementary school."

Undergraduates who are required to take a content area reading class tend to question its usefulness to them and the career choices they have made. Thus, the attitude toward reading in the content area is often one of frustration and despair. Content-area teachers know they need to deal with reading in their subject areas in order for students to be successful, but they are not sure how to go about doing that.

Let's begin by demystifying reading instruction at the secondary level. Perhaps, it will be helpful to identify what reading at this level is NOT. Reading instruction at the secondary level is not teaching reading through isolated drills and worksheets; it is not teaching decoding skills; it is not the main focus of content area teaching. What reading is, at the secondary level, is a tool for learning. Reading in the content area is designed to help readers be functional in science, math, history, and English. The goal is for students to make sense of the materials they are using and the information that is being presented.

Authors, Vacca and Vacca posit that teachers can increase the likelihood that reading will be successful by preparing students to approach texts. As students get ready to read, they need to build a frame of reference for the new information they will encounter. Students need to recognize how new material fits into

what they already know. Several strategies help students build and activate background knowledge and establish a frame of reference for reading content materials:

1. Read Multiple Texts. Have students read materials in addition to textbooks. Magazines, pamphlets, journal articles, and popular books are excellent choices. Reading about a topic enhances the comprehension of future reading on the same topic.
2. Use Advanced Organizers. An advanced organizer is a summary of the text selection that students will be reading. This is useful if the material presented is likely to be difficult. The organizer is designed to highlight the main idea of a chapter or a passage in the text. The organizer, whether it is a written paragraph, a graphic representation, or a verbal introduction, provides a frame of reference for readers and helps students link what is familiar with what is not. The use of concrete examples, anecdotes, and/or analogies helps readers differentiate what they already know about the topic from what they will be learning.
3. Preview (as an advanced organizer). A preview is another way of preparing students to confront new material. The preview consists of a few statements about the topic/concept that will be studied, a question to create an interest or arouse curiosity in the topic, and a familiar link

between the new information and something students already know. Students are provided a summary or synopsis of the material--roughly one-tenth of the original text (Vacca & Vacca, 1986); key terms within the context of the previewed passage are defined, and students are ready to begin the assigned reading.

Helping students prepare to read takes time and may ultimately result in covering less material, but the net effect is improved student understanding. It's a cost-effective decision that teachers have to make, and it's a tough one in view of the crowded curriculum and the demands that are placed on a teacher's time.

The same situation holds true for teachers of writing. Often, up to 60% of a writer's time is spent getting ready to write (Murray, Write to Learn, 1983). Selecting a topic, collecting information, reading, researching, interviewing, and drafting are time-consuming activities which often procede producing the final draft. Yet the product is richly enhanced by the writer's preliminary efforts. You may want to try developing a preliminary reading activity for a lesson in your classroom and see if the rewards offset the time involved. Several articles in your package suggest specific ways to approach this task.

An additional pre-reading strategy you may wish to consider is the development of an anticipation guide. An example provided

by Vacca and Vacca showed how a science teacher began a weather unit by introducing a series of popular cliches about the weather. He asked students to anticipate whether or not the cliches (for example, if a ground hog sees his shadow, there are six more weeks of winter) had a scientific basis. As the students approached chapters in the text, the teacher suggested that the assignment would explain whether or not there was a basis for the saying. Students were directed to read to find out what the explanation was. Predicting the "truth" or "falsity" of the cliches was a way for students to develop a frame of reference for interacting with the new material.

Another way to assist students in an active engagement with the text is to encourage students to generate questions about what they will read. By asking two questions: "What do I think this selection is about?" and "Why do I think so?" students are encouraged to examine their background knowledge and make predictions about the content of the new material. Asking questions about prior reading material helps the reader clarify purposes for reading.

An activity like this may involve requesting students to listen to or to skim the beginning portion of a reading assignment and then list several questions they think will be answered by reading the material. You may want to discuss some of the questions

posed by the students before they begin the actual reading. Students then read to see if their questions are answered.

Background building activities, such as multiple readings, advanced organizers, prediction guides, and self-questioning, are strategies that contribute to the student's ability to interact successfully with texts.

Another tool available to content area teachers is writing. The professional literature is replete with research that supports writing as a tool for learning. Language scholar James Moffett (1983) contends that to compose is to comprehend. Writing teacher and researcher Donald Murray (1983) posits that writing is thinking made visible. Reading researchers point out that both reading and writing are acts of composing. Yet a study conducted by Arthur Applebee (1981) showed that less than five percent of lesson time in any secondary classroom was devoted to writing that required students to produce a text of paragraph length or longer. Very little writing takes place throughout the day for the majority of students.

The article in your package by Carl Smith poses the question, "Does it help to write about your reading?" Even though the area is ripe for further investigation, Smith contends that written responses which require a depth of processing, such as an essay, a summary, or a paraphrase, will increase students' ability to infer meaning from written texts. He points out that writing encourages

engagement with texts, which leads to better comprehension. Because comprehension is the goal of content area instruction, it is important to keep content at the center of the writing process. Once you determine your content objectives, then appropriate writing activities can be constructed.

There is a wide range of writing activities that can be used to explore content area material. Writing an essay promotes analysis and synthesis; writing a summary of a reading selection helps students to understand and retain information. It involves reducing the text to its main points while maintaining the gist of the material.

Other possibilities for writing in the content area include: public and personal letters, requests, editorials, commentaries, case studies, poster displays, book, film, and documentary reviews, science notes, lab reports, observations, responses to literature, interviews, technical reports, written debates, radio scripts, cartoons, and many others. The point is that content ideas can be expressed through a variety of forms of written discourse. What is provided to you is an opportunity to examine your students' thinking. When students explore material from your class in writing and "do it justice," they demonstrate the degree to which they understand the concepts that were presented.

A final factor to be considered in our discussion of reading in the content area is the relationship of texts and textbooks to

students' learning. The way ideas are organized in a text can be a major source of difficulty for readers. The purpose of a textbook is to provide readers with information. To make information accessible, authors generally organize material in two ways--through external and internal text structures.

External organization is characterized by the text's overall instructional design--its format features within chapters, as well as at the beginning and the end of the textbook. Format features are not included to organize the book as much as they are designed to facilitate reading. Aids such as the preface, the table of contents, appendices, indexes, and bibliographies are referred to as front and end matter of the book (Vacca and Vacca, 1986).

Inexperienced readers rarely acknowledge the format features of a textbook; yet, the features offer important information to the textbook user. In addition to front and end matter, each chapter of a textbook usually has introductory and summary statements, headings, graphs, charts, and often guide questions. Each of these serves a purpose in reading. For example, headings are inserted to divide a chapter into logical sections, each highlighting a major idea. Students can preview a text by examining the external features of the book and set the stage for active reading.

Internal organization is characterized by the interrelationship among ideas in texts as well as by the subordination of some

ideas to others. Internal organization is often referred to as the top-level structure of a text (Vacca and Vacca, 1986). Because textbooks are informative, it is necessary to arrange ideas in a logical way. Generally, the most important ideas follow to provide additional information about the ideas above them.

Good readers are able to discriminate between important points and supporting details. They are also able to identify the important ideas by recognizing the form that top level structures are likely to take. For example, words such as "to begin with," "finally," "most importantly," and "next" are used in a top-level structure called enumeration. This structure shows up frequently in expository texts. Another top level structure students can look for has to do with sequencing information. Words such as "now," "before," "after," "when," and "on" are used to put facts into a sequential order. These words signify to the reader that material is being ordered. Comparison/contrast is another feature frequently used by authors to organize information in textbooks. This top-level structure is designed to point out similarities and differences in ideas. Words such as "as well as," "on the other hand," "not only," "similarly," and "either/or" are used. A fourth text structure that students are likely to encounter is cause and effect, which shows how things happen as a result of other things. These structures, along with other text features, are discussed in the article in your package by Konopak, Martin, and Martin.

As students become aware of how information is organized in texts, they become better able to use these strategies for studying. They can look for identifying structures and know that the writer is giving them cues about how information has been organized. We know that meaning is enhanced when the reader recognizes the structure of relationships in textbooks and differentiates the important ideas from the less important ones.

Successful reading involves a negotiation between the reader, the writer, and the text. By helping students use their background knowledge, identify the top-level structures of a text, and recognize the author's cues, you help them gain control of their own reading process. Gaining control gives the student a sense of ownership in the learning process and contributes to the overall level of comprehension the reader will experience with texts and textbooks in the content-area classroom.

ERIC® CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS

August 1989 DIGEST

Content Area Textbooks: Friends or Foes?

by Patricia Tefft Cousin

Walk into any upper elementary, junior high, or secondary classroom and ask the teacher to tell you about one of the main areas of difficulty that students with learning problems are having as they learn social studies or science. You will hear the same reply echoed from classroom to classroom, "reading the textbook." There are many reasons for this—some having to do with the text itself, such as its organization and format; some having to do with the students, and their reading competencies, background experiences, or interests; and, finally, some centering on the teacher, such as his or her competence in organizing and presenting the material.

Many of the attempts to address this problem have been to suggest that texts need to be adapted for students with learning difficulties or that there are special strategies and techniques that need to be used with these students which enhance their understanding of text material. One newer conclusion in this area is that features of a text that support the reading of students with learning difficulties also support those who are not having difficulties. Likewise, teaching strategies that support students having difficulty are also considered useful for all students (Larrivee, 1986; Wang, Reynolds, and Walberg, 1988). This is an important point since, as demographic projections indicate, we are now working with and will continue to work with more students at high risk for having learning difficulties in the future (U.S. Bureau of Census, 1983; 1985). We will need to consider effective ways to meet their needs within regular class settings (Wang, Reynolds, and Walberg, 1988).

Are Findings Applied?

Research has indicated that current information about reading and the effective teaching of reading has not yet made much impact on textbooks. As a result, there is much room for improvement in how textbooks are written (Armbruster and Gudbrandsen, 1986; Osborn, *et al.*, 1985). Several checklists, based on the application of this research, have been developed to assess textbooks (Armbruster and Anderson, 1981; Armbruster and Anderson, 1985; Singer, 1985). These checklists attempt to highlight features of texts that tend to make them more readable or, as Singer (1985) called them, "friendly" texts.

It stands to follow then that one focus of the research in this area has been to consider how to revise textbooks to make them more understandable. Studies considering the effect of revisions on improving comprehensibility have been inconclusive, with a few exceptions (see the review in Graves, *et al.*, 1988). This finding is attributed to the many factors which influence understandability. Those studies that have shown significant results are those which have manipulated many factors in the text and, thus, were not able to delineate any *one* critical factor.

Some approaches: readability, clarifications, graphics

One recent study in this area involved the revision of an expository text by text linguists, composition instructors, and former magazine editors. The most readable revisions were those done by the magazine editors. The study suggested that the most comprehensible texts were those in which attention was given to the structure, content, and style of the text (Graves *et al.*, 1988).

Another way of modifying the text has been to use abridgement and rewriting. Abridgement refers to eliminating subplots and details, while rewriting focuses on replacing words and syntactic structures with supposedly simpler versions. The problem has been that simplification may in some cases make a text more difficult to read because character contrasts are reduced and beliefs about the lexical difficulty of specific words often differ. Words that one individual judges as difficult are judged as easy by another (Campbell, 1987).

Another area of concern has been that texts tend not to address misconceptions that students commonly have about content area subjects. Two studies (Eaton, *et al.*, 1983; Smith, 1983), have examined students' misconceptions about scientific concepts and how texts often do not consider these areas. The latter study identified four broad categories of misconceptions and suggested that these areas be addressed in the student text and teacher manual.

Studies of effective textbook adaptations have included recommendations to include more graphics (Burnette, 1982). Herum (1982) found that revising texts to include more graphics and to make the text more explicit supported college students with learning difficulties. Bergerud, *et al.* (1988) compared the effectiveness of two types of textbook adaptations—graphics and study guides—for the purpose of self-study, with students identified as either low achievers or learning disabled. The use of graphics, consisting of diagrams with parts of pictures or labels missing, was found to be superior to the other approaches as measured by a retention test.

Findings of Special Projects

A project funded by the ERIC Clearinghouse on Handicapped and Gifted Children (Burnette, 1982) focused on the adaptation of several textbook-based curricula for the purpose of making them more appropriate for mainstreamed students. The adaptations included revising texts to include text aids such as, structured overviews, organiz-

Dr. Patricia Tefft Cousin is Assistant Professor of Graduate Programs in the School of Education at California State University—San Bernardino.

ers, chapter summaries; the use of audiotapes; inclusion of manipulatives and games in the curriculum; and development of computer software. These adaptations were found to be appropriate within a regular classroom setting and improved the learning outcomes of *all* the students, not just those identified as special needs learners.

The Office of Special Education Programs (OSEP), of the U.S. Dept. of Education, funded a project which supported the collaboration of educators, researchers, and publishers for the purpose of improving the usability of textbooks, particularly for use with diverse groups of learners (Educational Development Center and RMC Research Corporation, 1988). The project involved conducting a review of the literature on learners and effective instruction, developing an instrument to analyze textbooks, evaluating textbooks using this instrument, developing a set of recommendations, and holding a conference involving the three groups to discuss the findings.

The instructional design of 12 elementary and secondary social studies and science textbook programs, with their ancillary materials, was reviewed. The questionnaire used to evaluate the texts was based on current information regarding the nature of learning and the characteristics of learners. The evaluation of the texts and recommendations for change were organized into three major areas including: 1) getting students ready to learn, 2) engaging students in the learning process, and 3) having students demonstrate competence and expand knowledge.

All of the programs reviewed were rated as visually appealing with good designs and graphics. However, it was reported that many of the ancillary materials were not well coordinated with the content of the lesson.

We already have a great deal of information about what makes a text more understandable and supportive to the student in learning concepts. Yet research in the area of text adaptation indicates that the process of revision is complex and cannot be addressed with simple solutions. However, research has also indicated that publishers do need to consider particularly the need for the inclusion of additional graphics and attention not only to the content, but also to the organization and style of the text.

References

Armbruster, Bonnie B., and Anderson, Thomas H. *Content Area Textbooks*. Reading Education Report No. 23. Cambridge, Massachusetts: Bolt, Beranek, and Newman, Inc.; Champaign, Illinois: Center for the Study of Reading, 1981.

Armbruster, Bonnie B., and Gudbrandsen, Beth. "Reading comprehension instruction in social studies programs," *Reading Research Quarterly*, 21, (1) 1986, pp. 36-48.

Bergerud, Donna, *et al.* "The effectiveness of textbook adaptations in life science for high school students with learning disabilities," *Journal of Learning Disabilities*, 21, (2) 1988, pp. 70-76.

Burnette, Jane. "Adapting instructional materials for mainstreamed students." Reston, Virginia: ERIC Clearinghouse on Handicapped and Gifted Children; Reston, Virginia: Council on Exceptional Children, 1987. 3 pp. [ED 297 557]

Campbell, Nancy. "Adapted literary texts and the EFL reading programme," *ELT Journal*, 41, (2) 1987, pp. 132-135.

Eaton, Janet F., *et al.* "Students' misconceptions interfere with learning: Case studies of fifth-grade students." East Lansing, Michigan: Institute for Research on Teaching, 1983. 32 pp. [ED 228 094]

Educational Development Center and RMC Research Corporation. *Improving textbook usability*. Conference Report, 1988.

Graves, Michael F., *et al.* "Some characteristics of memorable expository writing: Effects of revisions by writers with different backgrounds," *Research in the Teaching of English*, 22, (3) 1988, pp. 242-265.

Herum, John. "A college professor as a reluctant learner: Facing up to the learning disabled. Alternative techniques for teaching English composition to learning disabled students in the university." Ellensburg, Washington: Instructional Media Center, 1982, 36 pp. [ED 234 547]

Larrivee, Barbara. "Effective teaching for mainstreamed students is effective teaching for all students," *Teacher Education and Special Education*, 9, (4) 1986, pp. 173-179.

Osborn, J., *et al.* "The case for improving textbooks," *Educational Leadership*, 42 (7), 1985, pp. 9-16.

Singer, H. "Criteria for selecting friendly texts," In *Content Area Reading: Improving Classroom Instruction*, E. Dishner, *et al.* Eds.). Dubuque, Iowa: Kendall Hunt, 1985.

Smith, Edward L. "Teaching for conceptual change: Some ways of going wrong." Paper presented at the International Seminar on Misconceptions in Science and Mathematics, 1983, 26 pp. [ED 237 493]

U.S. Bureau of the Census. Projections of the population of the United States: 1982-2050. *Current Population Reports* Series P25 No. 922P Washington, D.C.: 1983.

U.S. Bureau of Census. *Statistical abstract of the United States*, 1986 (106th ed.) Washington, D.C.: U.S. 1985.

Wang, M. C. *et al. Handbook of Special Education: Research and Practice*. (Vols. 1-3). Oxford, England; Pergamon Press, 1987-1988.

ERIC Clearinghouse on
Reading and Communication Skills
Indiana University
Smith Research Center
2805 East Tenth Street, Suite 150
Bloomington, IN 47405
(812) 855-5847

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. RI88062001. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions, however, do not necessarily represent the official view or opinions of the Office of Educational Research and Improvement.

Task #1

Goal Statement

Your Name:_____

Course #:_____

Learning package:_____

The purpose of writing a goal statement is to create an expectation for yourself, to establish a purpose that you can check when you have finished reviewing the package of materials. It should be used in conjunction with your reaction statement--the commentary that you will make after working your way through the materials in the learning package.

Directions: This is a pre-reading activity. Think about the topic of this package and then look at the various materials, primarily reviewing their headlines and subheads. What does that review prompt you to want to discover through this package?

Write a goal statement of no more than one paragraph that includes the questions that you want answered or the kinds of applications that you hope the package will help you accomplish in your work. Attached please find examples of representative goal statements submitted by former students.

Mail a copy of your goal statement to your instructor. Please keep a copy for yourself because your reaction statement should be based partly on the goal statement.

My Goal Statement for this Package

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

Examples of Goal Statements

It is my expectation that this learning package will direct me in new directions so that I may improve my instruction in the area of vocabulary. I would like to know when it is best to introduce new vocabulary words. I would also like to gain information about new methods one might use when introducing new vocabulary. I expect to read about some of the newest research related to vocabulary instruction. It is also expected that tested methods will be described and examined. I would hope that these articles would help me improve how I teach so that my students will benefit and become better readers.

Following the study of this package, I expect to increase my understanding of computer usage in reading development, learn how to integrate computers into reading and writing instruction for learning impaired students, and make decisions on the usefulness of computer games in the classroom.

Following completion of this package I intend to:
1)Identify the components of a formal reading program evaluation.
2)Analyze the characteristics of an effective reading program.
3)Develop evaluation strategies that will improve the monitoring of my program objectives.

Task #2

Reaction Statement

You are asked to type a four-page reaction to this learning package as a way of firming up your sense of what you find interesting, important, or beneficial in this group of materials. You should construct this reaction with your previously established goal statement in mind.

Given below are a number of prompts to indicate the kinds of questions that you might wish to answer in developing this reaction. You may use other questions than those that are here listed. We anticipate that your reaction will be approximately four typewritten, double-spaced pages. Please use the following format in heading your paper.

Reaction

Your Name:_____

Course #:_____

Learning Package:_____

Reaction Prompts

1. Were your goals realized, and how do you know? (Refer to your goal statement.)

2. What important or beneficial ideas did you find in these materials? (Please cite the articles.)

3. Are there trends or concerns in the materials that bother you? Are there those that you agree with? Discuss. (Please use the annotated bibliography and cite ideas from it.)

4. What ideas did you want to try in your daily work world? Describe how you could apply these ideas?

Application Project

If you decide to use this topic for one of your two application projects, you may want to spend more time thinking about ways that you could explore one or more of these ideas in your work.

When you have finished your statement, please mail it to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

Task #3

Application Project

As you select your two application projects, use the following guidelines:

1. **Formulate a question** that you would like to answer regarding this topic. (For example, can my slow readers use some of the self-monitoring strategies discussed in these materials?) A question often helps to clarify the kinds of information that you will collect or the kinds of evidence that you will use to convince a reader that you are pursuing an interesting question.

2. **Describe with as much detail** as is needed for a reader to understand what you did, what materials you used, what major procedures you used, what evidence you were looking for, in order to answer your question.

3. **Gather evidence** from your students or from teachers to show samples of the kinds of work or the kinds of interactions that were taking place. These samples may be your written observations, sample student papers, photographs, activity sheets, book titles, statistical data, or any other kind of evidence that demonstrates the reality of your inquiry.

4. **Write a summary** of your plan and of your conclusions. The summary should be coherent and clear so a person who was not on site can understand what you attempted and can appreciate the conclusions that you drew.

5. **Send a report** that includes a summary of your plan, sample evidence of what you found, a brief analysis of the evidence, and the conclusions that you

6. **Provide a cover page** that gives your name, address, course number, topic of learning package, and topic of your project. We will mail you a critique of your work. Send your report to:

   Carl B. Smith
   150 Smith Research Center
   Indiana University
   Bloomington, IN 47408-2698

Course Number_____ **Date**_____

Package Title_____

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. This package will help me do my job better.					
2. The pace of the package was too fast.					
3. The package's directions were confusing.					
4. It was easy to follow the directions given in the package.					
5. The package was too easy.					
6. The package was too long.					
7. The package should include more articles and documents to read.					
8. I didn't know the meaning of many words used in the package.					
9. The lecture explicated the topic of the package.					
10. The package's objectives were clear from the start.					
11. The package's teaching points were clear.					

What did you like best about the package?

What did you like least about the package?

How would you improve the package?

Please list other topics you would be interested in studying through our program.

Name (optional)_____

Position_____

Years Taught_____

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

ERIC/RCS

Selected Abstracts from the ERIC Database

ERIC Clearinghouse on Reading & Communication Skills
Indiana University
Bloomington, Indiana
(812) 855-5847

BEST COPY AVAILABLE

Sample ERIC Abstract

AN ED289160
AU Binkley,-Marilyn-R.; And-Others
TI Becoming a Nation of Readers: What Parents Can Do.
CS Heath (D.C.) and Co., Lexington, Mass.; Office of Educational Research and Improvement (ED), Washington, DC.
PY 1988
AV What Parents Can Do, Consumer Information Center, Pueblo, CO 81009 ($.50).
NT 40 p.; For Becoming a Nation of Readers: The Report of the Commission on Reading, see ED 253 865.
PR EDRS Price - MF01/PC02 Plus Postage.
DE Beginning-Reading; Literacy-Education; Parent-Attitudes; Parent-Child-Relationship; Preschool-Children; Primary-Education; Reading-Aloud-to-Others; Reading-Attitudes; Recreational-Reading; Written-Language
DE *Literacy-; *Parent-Influence; *Parent-Participation; *Reading-Instruction; *Reading-Processes
ID Reading-Motivation
AB Intended for parents and based on the premise that parents are their children's first and most important teachers, this booklet is a distillation of findings from the 1984 report of the Commission on Reading, "Becoming a Nation of Readers." The introduction reiterates the Commission's conclusions (1) that a parent is a child's first tutor in unraveling the puzzle of written language; (2) that parents should read to preschool children and informally teach them about reading and writing; and (3) that parents should support school-aged children's continued growth as readers. Chapter 1 defines reading as the process of constructing meaning from written texts, a complex skill requiring the coordination of a number of interrelated sources of information. Chapter 2, on the preschool years, focuses on talking to the young child, reading aloud to the preschooler, and teaching children about written language. The third chapter, on beginning reading, counsels parents on what to look for in good beginning reading programs in schools, and how to help the child with reading at home. The fourth chapter, on developing readers and making reading an integral part of learning, offers suggestions for helping the child succeed in school and for encouraging reading for fun. The afterword calls on teachers, publishers, and school personnel, as well as parents, to participate actively in creating a literate society. The booklet concludes with a list of organizations that provide practical help or publications for parents.

Interpretation of ERIC Abstract Field Identifiers

AN ERIC accession number (Use this number when ordering microfiche and paper copies.)
AU Author(s)
TI Title
CS Corporate source
PY Actual or approximate publication date
AV Source and price (availability)
NT Pagination and additional information (such as legibility or related documents)
PR Indicates availability of document from the ERIC Document Reproduction Service
DE Descriptors-indexing terms from the *Thesaurus of ERIC Descriptors* which indicate important concepts in the document
ID Identifiers-indexing terms not included in the *Thesaurus of ERIC Descriptors*
AB Summary

AN: ED282187
AU: Alvermann,-Donna-E., Ed.; And-Others
TI: Research within Reach: Secondary School Reading: A Research Guided Response to Concerns of Reading Educators. [Revised.]
CS: Appalachia Educational Lab., Charleston, W. Va.; International Reading Association, Newark, Del.
PY: 1987
AV: International Reading Association, 800 Barksdale Rd., PO Box 8139, Newark, DE 19714-8139 (Book No. 784, $7.50 member, $11.25 nonmember).
NT: 201 p.; Updated version of ED 273 928.
PR: EDRS Price - MF01/PC09 Plus Postage.
DE: Critical-Thinking; Decision-Making; Educational-Theories; Grouping-Instructional-Purposes; Metacognition-; Program-Development; Program-Effectiveness; Readability-; Reading-Programs; Reading-Skills; Secondary-Education; Student-Motivation; Teacher-Role; Teaching-Methods; Vocabulary-Development
DE: *Content-Area-Reading; *Reading-Comprehension; *Reading-Instruction; *Reading-Research; *Reading-Writing-Relationship; *Theory-Practice-Relationship
AB: Focusing on how secondary school reading programs can be organized and on how their effectiveness can be measured, this book synthesizes reading research in several significant areas and makes concrete suggestions for using this research to improve reading instruction. Each chapter, opens with a question posed by a teacher, discusses research with reference to this question, and concludes with a summary and a list of references. Generally, chapters present various, well-documented processes and products (individually or in limited combinations) that contribute to effective reading instruction in secondary schools. The practitioners' contribution to the advancement of knowledge in the field is recognized, thereby enhancing the reciprocity between researchers and practitioners. Each chapter concludes with a summary and a list of references. Titles and authors of chapters included are (1) "Reading Programs" (D. W. Moore and A. G. Murphy); (2) "Effective Schools/Effective Teaching Research" (M. W. Conley and A. G. Murphy); (3) "Developing Lifetime Readers" (D. E. Alvermann); (4) "Learning from Text" (D. E. Alvermann); (5) "Comprehension/Thinking Skills" (D. E. Alvermann); (6) "Vocabulary" (D. W. Moore); (7) "Readability" (D. Holdzkom); (8) "Selection of Materials" (D. W. Moore and A. G. Murphy); (9) "Integrating Oral and Written Language" (D. E. Alvermann); (10) "Grouping" (M. W. Conley); (11) "Teacher Decisionmaking" (M. W. Conley); (12) "Metacognition" (D. E. Alvermann); and (13) "Staff Development" (P. B. Lutz). (JD)

AN: ED287160
AU: Alvermann,-Donna-E.; And-Others
TI: Using Discussion To Promote Reading Comprehension.
CS: International Reading Association, Newark, Del.

PY: 1987
AV: International Reading Association, 800 Barksdale Rd., P.O. Box 8139, Newark, DE 19714-8139 (Book No. 787, $4.50 member, $6.75 nonmember).
NT: 76 p.
PR: EDRS Price - MF01/PC04 Plus Postage.
DE: Class-Activities; Middle-Schools; Secondary-Education; Teaching-Methods
DE: *Content-Area-Reading; *Discussion-Teaching-Technique; *Reading-Comprehension
AB: Drawing from observations of discussion in 24 different classrooms, this book will provide preservice and inservice teachers at the middle and school levels with the motivation and knowledge to use discussion to foster student comprehension of content area text assignments. The first chapter examines the distinctions between discussion and recitation, and redefines major issues related to content area discussion in light of recent research and school reform reports. The second chapter establishes a basis for the premise that discussion is important to the development of reading comprehension, illustrating those skills that enrich or refine students' understanding of text. The third chapter uses portions of transcripts from videotaped content class discussions to illustrate how classroom context influences discussion practices. Alternatives to teacher dominated discussions are described, and guidelines are provided for establishing the rights and responsibilities of critical readers. The fourth chapter demonstrates how to plan for classroom discussion of assigned material, describing five aspects of the planning process. The fifth chapter presents discussion strategies that help students master the content, examine more than one side of the issue, and evaluate alternative solutions to a text based problem, while the sixth chapter analyzes one content area teacher's implementation of a preplanned discussion. Finally, the seventh chapter describes two procedures for informally evaluating classroom discussion used to promote reading comprehension. References follow each chapter. (HTH)

AN: ED280011
AU: Anthony,-Helene-M.; Raphael,-Taffy-E.
TI: Using Questioning Strategies to Promote Students' Active Comprehension of Content Area Material. Occasional Paper No. 109.
CS: Michigan State Univ., East Lansing. Inst. for Research on Teaching.
PY: 1987
AV: Institute for Research on Teaching, College of Education, Michigan State University, 252 Erickson Hall, East Lansing, MI 48824 ($4.00).
NT: 44 p.
PR: EDRS Price - MF01/PC02 Plus Postage.
DE: Reader-Response; Reading-Research; Secondary-Education;

Teacher-Role; Teacher-Student-Relationship; Teaching-Methods
DE: *Content-Area-Reading; *Questioning-Techniques; *Reader-Text-Relationship; *Reading-Comprehension; *Reading-Instruction; *Reading-Strategies
AB: To explore how instruction in questioning can enhance teachers' use of questions that promote comprehension and how teachers' instruction of students in such strategies can enhance their ability to comprehend content area texts independently, this paper looks at prereading, during-reading, and postreading questioning activities. The first major section of the paper discusses two kinds of conceptual knowledge involved in the comprehension of expository prose: text structure knowledge and knowledge of text processing strategies. The second section of the paper looks at the kinds of questioning strategies that have been effective in developing students' comprehension of expository text. Specifically, it uses a reading lesson as a framework for discussing questions used in the prereading, during-reading, and postreading stages of the lesson. The third section of the paper examines the instructional methods that contribute to students' independent use of questioning strategies: (1) direct explanation and modeling, (2) guided practice, and (3) question answer relationships. The paper concludes by noting that the quantity of research focusing on questioning underscores the pervasiveness of questioning strategies in the classroom. (A six-page list of references is provided.) (FL)

AN: EJ305959
AU: Armstrong,-David-G.
TI: Helping Youngsters Grapple with Textbook Terminology.
PY: 1984
JN: Social-Studies; v75 n5 p216-19 Sep-Oct 1984
AV: UMI
DE: Elementary-Secondary-Education; Vocabulary-Development
DE: *Basic-Vocabulary; *Content-Area-Reading; *Reading-Comprehension; *Social-Studies; *Teaching-Methods
AB: Methods that social studies teachers can use to help elementary and secondary students overcome textbook-related vocabulary difficulties are discussed. Methods include having teachers point out specialized uses of terms, identify potential areas of confusion, provide clear instructions, and prepare glossaries. (RM)

AN: EJ349084
AU: Bean,-Thomas-W.; And-Others
TI: Acquisition of Hierarchically Organized Knowledge and Prediction of Events in World History.
PY: 1987
JN: Reading-Research-and-Instruction; v26 n2 p99-114 Win 1987
AV: UMI

DE: Cognitive-Processes; Comparative-Analysis; Knowledge-Level; Secondary-Education; Textbooks-; World-History
DE: *Content-Area-Reading; *History-Instruction; *Prediction-; *Reader-Text-Relationship; *Reading-Instruction; *Reading-Research AB: Indicates that textbook explication alone of causes of events is insufficient for acquisition and use of hierarchically organized knowledge; students must be taught how to construct text-based information into hierarchically structured form and use it for making predictions. (FL)

AN: EJ332875
AU: Bean,-Thomas-W.; And-Others
TI: Teaching Students How to Make Predictions about Events in History with a Graphic Organizer Plus Options Guide.
PY: 1986
JN: Journal-of-Reading; v29 n8 p739-45 May 1986
AV: UMI
DE: Critical-Thinking; History-; Junior-High-Schools; Schemata-Cognition; Secondary-Education; Social-Studies; Textbooks-
DE: *Cognitive-Processes; *Content-Area-Reading; *Reading-Comprehension; *Teaching-Methods
AB: Outlines a teaching strategy in which students use graphic organizers plus options guides to increase their success on higher-level thinking tasks. (DF)

AN: EJ323506
AU: Blanchard,-Jay-S.; Mason,-George-E.
TI: Using Computers in Content Area Reading Instruction.
PY: 1985
JN: Journal-of-Reading; v29 n2 p112-17 Nov 1985
AV: UMI
DE: Secondary-Education; Teaching-Methods; Writing-Skills
DE: *Computer-Simulation; *Computer-Software; *Content-Area-Reading; *Microcomputers-; *Telecommunications-; *Word-Processing
AB: Describes five categories of computer programs useful for content area reading instruction: utility programs, word processing, simulations, telecommunications for access to a database, and story architecture. (HOD)

AN: EJ378630
AU: Brozo,-William-G.
TI: Applying the Reader Response Heuristic to Expository Text.
PY: 1988
JN: Journal-of-Reading; v32 n2 p140-45 Nov 1988
AV: UMI
DE: Expository-Writing; Heuristics-; Secondary-Education; Student-Writing-Models; Writing-Instruction

DE: *Content-Area-Reading; *Reader-Response;
*Reader-Text-Relationship
AB: Describes a reader response heuristic which approaches expository texts on a feeling and experiential level. Focuses on the work of one student writer to show how the student's interpretations of a text on Arab-Israeli relations was mediated by the student's feelings and experiences. (MM)

AN: ED221879
AU: Callahan,-Tim; Felton,-Randall
TI: The Newspaper in the Social Studies Classroom: An Issue Oriented Curriculum.
PY: [1980]
NT: 9 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Instructional-Materials; Secondary-Education
DE: *Content-Area-Reading; *Learning-Activities; *Newspapers-; *Social-Problems; *Social-Studies; *Teaching-Methods
AB: Social studies teachers can involve their students in an issues-oriented curriculum by using the least expensive, least threatening medium available, the newspaper. The newspaper's stock in trade is the relevant, timely issue--just what is missing from all too many social studies classrooms. In dealing with issues in social studies classrooms, teachers are only limited by their imaginations. For example, three specific issues that can be explored through the use of the newspaper are gun control, capital punishment, and societal roles. Each issue can become an activity unit that would be approximately 1 to 2 weeks in length. A collection of news articles, editorials, letters to the editor, syndicated columns, editorial cartoons, and even advertisements would be useful to a discussion of gun control. The controversy surrounding capital punishment can be explored through a study of editorial pages. The advertising media of newspapers is a good place to examine how societal roles are changed or perpetuated. (Discussion questions and sequential activities are suggested for each topic issue.) (HOD)

AN: EJ365868
AU: Carnes,-E.-Jane
TI: Teaching Content Area Reading through Nonfiction Book Writing.
PY: 1988
JN: Journal-of-Reading; v31 n4 p354-60 Jan 1988
AV: UMI
DE: Independent-Reading; Junior-High-Schools; Reading-Research; Reading-Writing-Relationship; Secondary-Education; Student-Research; Teaching-Methods; Units-of-Study
DE: *Content-Area-Reading; *Content-Area-Writing; *Nonfiction-; *Reading-Instruction; *Reading-Strategies; *Writing-for-Publication

AB: Describes a teaching unit for junior high school content area classes that is intended to provide students with effective strategies for reading nonfiction. The unit involves independent reading, research, and writing activities which culminate in the publication of student-written nonfiction books on topics of the student's choice. (SKC)

AN: ED228633
AU: Colwell,-Clyde-G.; And-Others
TI: A Reading Guide: Assisting Content Area Teachers.
CS: Kansas State Univ., Manhattan.; Manhattan Unified School District, KS.
PY: 1983
NT: 96 p.
PR: EDRS Price - MF01/PC04 Plus Postage.
DE: Home-Economics-Education; Language-Arts; Learning-Activities; Mathematics-Instruction; Physical-Education; Reading-Improvement; Secondary-Education; Second-Language-Instruction; Social-Studies; Teaching-Methods
DE: *Content-Area-Reading; *Lesson-Plans; *Reading-Instruction; *Reading-Skills; *Study-Skills
AB: Intended for use by content area teachers who wish to design lesson plans that incorporate reading and study skills strategies, this guide contains ideas for lessons and example lessons for a variety of subject areas. The lesson ideas and plans, developed by participants in a schoolwide staff development program, cover the disciplines of language arts, social studies, home economics, foreign languages, physical education, and mathematics. Each plan lists objectives, materials needed, strategy to be used, evaluation criteria, and comments by teachers who have used the lesson. (FL)

AN: ED281165
AU: Fuchs,-Lucy
TI: Teaching Reading in the Secondary School. Fastback 251.
CS: Phi Delta Kappa Educational Foundation, Bloomington, Ind.
PY: 1987
AV: Phi Delta Kappa, Eighth and Union, Box 789, Bloomington, IN 47402 ($0.90).
NT: 34 p.; This publication was sponsored by the St. Leo Florida Chapter of Phi Delta Kappa.
PR: EDRS Price - MF01/PC02 Plus Postage.
DE: Lesson-Plans; Reading-Strategies; Secondary-Education; Study-Skills; Supplementary-Reading-Materials; Teaching-Methods; Vocabulary-Development
DE: *Class-Activities; *Content-Area-Reading; *Critical-Reading; *Reading-Comprehension; *Reading-Instruction; *Reading-Skills; *Teacher-Role
AB: Intended for use by secondary school teachers in all subject areas, this booklet provides practical information, classroom

activities and strategies for the instructor who wants to incorporate reading instruction into a particular content area. Following an introductory chapter that emphasizes the need for reading skills in contemporary society and the secondary school teacher's strategic position for preparing students for the world of work, the booklet offers specific chapters on (1) vocabulary development; (2) reading in the content areas; (3) incorporating reading into lesson planning; (4) using questions to develop critical reading; (5) reading and study skills, such as outlining, note-taking, and study methods; (6) guiding teenage reading choices; and (7) other reading activities, including reading newspapers (especially the sports pages), junk mail, and television-related material. The booklet also contains some concluding remarks and a bibliography. (NKA)

AN: ED249466
AU: Hall,-Cherlyn
TI: Reading in Secondary Mathematics: Problems, Suggestions, Sources.
PY: 1984
NT: 121 p.; Master's Thesis, William and Mary University.
PR: EDRS Price - MF01/PC05 Plus Postage.
DE: Learning-Activities; Mathematics-Teachers; Readability-; Secondary-Education
DE: *Content-Area-Reading; *Mathematical-Vocabulary; *Mathematics-Instruction; *Reading-Difficulties; *Reading-Skills; *Reading-Strategies
AB: Intended to provide guidance for secondary school mathematics teachers who desire to maximize the reading abilities of their students and thus maximize students' performance, this report attempts to make the secondary school teacher aware of some of the difficulties encountered in reading mathematics and offers some techniques, activities, and strategies to overcome these difficulties. The content is divided into five categories or factors that contribute to problems in reading mathematics: the language of mathematics, mathematical vocabulary and symbols, word problems, mathematical reading skills, and readability of mathematics textbooks. Each section includes a discussion of the reading problems, suggestions for overcoming difficulties in reading mathematics, and an annotated list of resources. (HOD)

AN: EJ363128
AU: Hallman,-Patsy
TI: Teaching Basic Academic Skills in Home Economics Classes.
PY: 1988
JN: Illinois-Teacher-of-Home-Economics; v31 n3 p123-25 Jan-Feb 1988
DE: Academic-Achievement; Content-Area-Reading; Mathematics-Skills; Secondary-Education; Writing-Skills
DE: *Basic-Skills; *Home-Economics; *Teaching-Methods

AB: Home economics teachers have always taught basic skills, but they must learn to identify clearly how basic skills are incorporated into classes, how skills are taught effectively, and how to publicize the fact. Various examples using reading, writing, and mathematics skills are provided. (CH)

AN: EJ359216
AU: Hammond,-Louise
TI: A Compendium of Wisdom for the Reading Specialist: 18 Sources, Annotated.
PY: 1987
JN: Journal-of-Reading; v31 n2 p118-23 Nov 1987
AV: UMI
DE: Annotated-Bibliographies; Reading-Research; Reading-Skills; Secondary-Education
DE: *Content-Area-Reading; *Reading-Instruction; *Reading-Strategies; *Reading-Teachers; *Teaching-Methods
AB: Presents an annotated list of sources of tried-and-true activities that will help to put teachers on track with content area instruction. Intended as a resource for high school reading specialists who need to persuade content area teachers of the value of new and different instructional strategies. (SKC)

AN: EJ293086
AU: Holbrook,-Hilary-Taylor
TI: ERIC/RCS: Prereading in the Content Areas.
PY: 1984
JN: Journal-of-Reading; v27 n4 p368-70 Jan 1984
AV: UMI
DE: Reading-Skills; Secondary-Education; Teaching-Methods
DE: *Content-Area-Reading; *Reading-Instruction; *Reading-Readiness; *Schemata-Cognition; *Vocabulary-Skills
AB: Discusses specific strategies that introduce the text and its concepts before the actual text reading. (AEA)

AN: EJ383762
AU: Johnson,-Linda-Lee
TI: Learning across the Curriculum with Creative Graphing.
PY: 1989
JN: Journal-of-Reading; v32 n6 p509-19 Mar 1989
AV: UMI
DE: Charts-; Diagrams-; Higher-Education; High-Schools; Instructional-Materials; Learning-Strategies; Reading-Comprehension; Teaching-Methods
DE: *Content-Area-Reading; *Graphs-; *Study-Skills
AB: Describes an instructional technique called "creative graphing" in which students learn to reorder information visually, to interpret the graphic aids of their textbooks more easily, to highlight relationships that are not immediately

apparent in the text, and to illuminate ideas for further exploration using charts, trees, stars, chains, and sketches. (RS)

AN: EJ370152
AU: Jones,-Janet-Craven
TI: ERIC/RCS: Reading and Study Skills: Problems in the Content Areas.
PY: 1988
JN: Journal-of-Reading; v31 n8 p756-59 May 1988
AV: UMI
DE: Content-Area-Writing; Reading-Achievement; Reading-Failure; Reading-Improvement; Reading-Instruction; Teacher-Role; Visual-Aids; Vocabulary-Development
DE: *Content-Area-Reading; *Reading-Skills; *Reading-Writing-Relationship; *Study-Skills
AB: Discusses possible causes of the lack of good reading and study skills among U.S. secondary school students. Describes several techniques for improving these skills. (ARH)

AN: EJ359215
AU: Konopak,-Bonnie-C.; And-Others
TI: Reading and Writing: Aids to Learning in the Content Areas.
PY: 1987
JN: Journal-of-Reading; v31 n2 p109-15 Nov 1987
AV: UMI
DE: Cognitive-Processes; Learning-Strategies; Reading-Research; Secondary-Education; Teaching-Methods; Writing-Instruction; Writing-Research
DE: *Content-Area-Reading; *Content-Area-Writing; *Reading-Writing-Relationship
AB: Suggests using writing to enhance students' learning of content material because a positive environment that encourages writing allows students to explore, analyze, and synthesize what they are learning in a content classroom. Enumerates principles for facilitating comprehension and recommends using a guided writing procedure. (SKC)

AN: EJ296605
AU: Malone,-Mark; And-Others
TI: Commentary.
PY: 1984
JN: Journal-of-Reading; v27 n7 p581-85 Apr 1984
AV: UMI
DE: Integrated-Activities; Interdisciplinary-Approach; Secondary-Education
DE: *Content-Area-Reading; *Reading-Instruction; *Science-Instruction; *Teacher-Responsibility
AB: Presents an exchange of the views of six professional

educators on the place of reading in science instruction. (AEA)

AN: EJ364681
AU: Muth,-K.-Denise
TI: Teachers' Connection Questions: Prompting Students to Organize Text Ideas..
PY: 1987
JN: Journal-of-Reading; v31 n3 p254-59 Dec 1987
AV: UMI
DE: Connected-Discourse; Middle-Schools; Reader-Text-Relationship; Reading-Research; Secondary-Education; Teaching-Methods
DE: *Content-Area-Reading; *Questioning-Techniques; *Reading-Comprehension; *Reading-Instruction; *Reading-Strategies
AB: Explains how to ask questions that will help students focus on structure and better understand expository text. Notes that because students must make both internal and external connections to text structure, teachers should ask questions which prompt students to identify the relationships among ideas in a text so that meaningful learning can occur. (SKC)

AN: EJ364719
AU: Muth,-K.-Denise
TI: Structure Strategies for Comprehending Expository Text.
PY: 1987
JN: Reading-Research-and-Instruction; v27 n1 p66-72 Fall 1987
AV: UMI
DE: Cognitive-Mapping; Expository-Writing; Middle-Schools; Reading-Improvement; Reading-Research; Reading-Skills; Secondary-Education; Teaching-Methods; Thematic-Approach; Vertical-Organization
DE: *Comparative-Analysis; *Content-Area-Reading; *Learning-Strategies; *Metacognition-; *Reading-Comprehension; *Reading-Strategies
AB: Examines three strategies designed to help middle school students use text structures to comprehend expository text: (1) hierarchical summaries, (2) conceptual maps, and (3) thematic organizers. Summarizes advantages and disadvantages of each strategy and recommends that teachers consider the outcomes they want and select the most appropriate strategy for their particular purpose. (SKC)

AN: EJ268142
AU: Parrish,-Berta
TI: A Sporting Proposition: Reading in the Physical Education Curriculum.
PY: 1982
JN: Reading-World; v22 n1 p17-25 Oct 1982
AV: Reprint: UMI

DE: Individualized-Reading; Reading-Comprehension; Recreational-Reading; Secondary-Education; Vocabulary-Development
DE: *Content-Area-Reading; *Motivation-Techniques; *Physical-Education; *Reading-Instruction
AB: Proposes that physical education teachers can integrate reading exercises into their classes through activities that (1) stimulate recreational reading, (2) reinforce vocabulary and comprehension skills, and (3) provide reading opportunities through alternative learning options. (FL)

AN: EJ294669
AU: Phelps,-Stephen
TI: A First Step in Content Area Reading Instruction.
PY: 1984
JN: Reading-World; v23 n3 p265-69 Mar 1984
AV: UMI
DE: Reading-Strategies; Secondary-Education; Study-Skills; Teaching-Methods
DE: *Content-Area-Reading; *Course-Organization; *Educational-Objectives; *Reading-Instruction
AB: Argues that successful content area reading lessons are well-structured lessons. Explains organizing concepts and how to use them. (FL)

AN: ED301863
AU: Siegel,-Marjorie; And-Others
TI: A Critical Review of Reading in Mathematics Instruction: The Need for a New Synthesis.
PY: 1989
NT: 17 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Elementary-Secondary-Education; Literature-Reviews; Mathematics-Curriculum; Models-; Reading-Strategies
DE: *Content-Area-Reading; *Mathematics-Education; *Mathematics-Instruction; *Reading-Skills
AB: This paper reviews the literature on reading and mathematics and calls for a new synthesis which views reading as a mode of learning. This synthesis focuses not on the acquisition of techniques but on the process of doing mathematics and the more humanistic aspects of the discipline. Four alternative frameworks for the problem of "reading mathematics" are identified: (1) extracting information from technically oriented mathematics texts; (2) reading to learn so as to achieve the goal of a technically oriented mathematics curriculum; (3) introducing rich mathematical texts to provide students with information on important aspects of mathematics typically excluded from the mathematics curriculum; and (4) shaping a new synthesis in which reading to learn mathematics so as to understand mathematics becomes a "way of knowing." The literature for each of the frameworks is reviewed; most of the existing literature belongs

to the first framework. (A figure provides a theoretical grid of the four frameworks; 46 references are attached.) (RS)

AN: EJ383670
AU: Simons,-Sandra-McCandless
TI: P[illegible]T--A Reading Comprehension Strategy.
PY: 198[illegible]
JN: Journal-of-Reading; v32 n5 p419-27 Feb 1989
AV: UMI
DE: Lesson-Plans; Reading-Comprehension; Secondary-Education; Teaching-Methods; Textbooks-
DE: *Content-Area-Reading; *Reading-Strategies
AB: Describes a reading comprehension strategy--Prepare, Structure, Read, and Think (PSRT)--designed for subject area lessons that use expository textbooks. Presents a generic guide for planning and conducting a lesson based on PSRT. (MM)

AN: EJ377355
AU: Smith,-Patricia-L.; Tompkins,-Gail-E.
TI: Structured Notetaking: A New Strategy for Content Area Readers.
PY: 1988
JN: Journal-of-Reading; v32 n1 p46-53 Oct 1988
AV: UMI
DE: Content-Area-Reading; Outlining-Discourse; Reading-Instruction; Secondary-Education
DE: *Cues-; *Notetaking-; *Reading-Skills; *Study-Skills; *Text-Structure
AB: Describes a technique using expository text structures and graphic organizers as the basis for taking notes from content area texts. This technique can be transferred to notetaking during lectures. (RS)

AN: EJ306493
AU: Smith,-Richard-J.; Dauer,-Velma-L.
TI: A Comprehension-Monitoring Strategy for Reading Content Area Materials.
PY: 1984
JN: Journal-of-Reading; v28 n2 p144-47 Nov 1984
AV: UMI
DE: Cognitive-Processes; Metacognition-; Reading-Instruction; Secondary-Education; Teaching-Methods
DE: *Content-Area-Reading; *Reading-Comprehension; *Reading-Strategies
AB: Describes one strategy designed to help students monitor their comprehension while reading content area materials. (HOD)

AN: ED232138

AU: Stewart-Dore,-Nea
TI: Where Is the Learning We Have Lost in Information? Strategies for Effective Reading in Content Areas.
PY: 1982
NT: 35 p.; Paper presented at the World Congress on Reading (9th, Dublin, Ireland, July 26-30, 1982).
PR: EDRS Price - MF01/PC02 Plus Postage.
DE: Cognitive-Processes; Reading-Skills; Secondary-Education; Writing-Exercises
DE: *Content-Area-Reading; *Directed-Reading-Activity; *Models-; *Reading-Comprehension; *Reading-Instruction; *Teaching-Methods
AB: The Effective Reading in Content Areas (ERICA) teaching model comprises four stages: preparing for reading, thinking through information, extracting and organizing information, and translating information. Aspects to consider in the first stage include the preparation of ideas, text, and vocabulary. Two strategies can be used to promote reflection or thinking through reading, the second stage. Having read a selection, students are presented with a series of three sets of statements written at literal, inferential, and applied levels of thinking. Having decided, on the basis of their reading of the passage, which statements they are prepared to defend, students work in small groups to "talk out" their choices. The third stage of the ERICA model addresses teacher concerns about students copying large chunks of text, being unable to distinguish main ideas, and being unable to select information for inclusion in a summary. Extracting and organizing information activities foster independence in selecting and using information given in a text. Activities in the fourth stage, translating information, help students explore subject information through writing in terms of contexts of situation, role, audience, purpose, and form; and through the processes involved in drafting, reviewing, redrafting, editing, and publishing a range of writing. Not all stages need be included in any one teaching unit. (HOD)

AN: EJ290572
AU: Tanner,-Michael-L.
TI: Reading and Secondary Music: Let the Concert Begin.
PY: 1983
JN: Music-Educators-Journal; v70 n4 p40-45 Dec 1983
AV: UMI
DE: Learning-Activities; Lesson-Plans; Reading-Skills; Secondary-Education; Study-Guides
DE: *Content-Area-Reading; *Interdisciplinary-Approach; *Music-Education
AB: Reading can be taught in music classes to enhance the music curriculum. Gives lesson plans and study guides for reading instruction in areas like vocabulary building, comprehension, study skills, and thinking skills, all adapted to serve musical purposes.
(CS)

AN: EJ379871
AU: Thomas,-David-A.
TI: Reading and Reasoning Skills for Math Problem Solvers.
PY: 1988
JN: Journal-of-Reading; v32 n3 p244-49 Dec 1988
AV: UMI
DE: Cognitive-Processes; Logical-Thinking; Mathematics-Skills; Reading-Instruction; Reading-Skills; Semantics-
DE: *Mathematics-Instruction; *Problem-Solving; *Teaching-Methods; *Word-Problems-Mathematics
AB: Encourages classroom teachers to improve their students' reading and reasoning skills by helping them to interpret math problems correctly. (RAE)

AN: EJ271132
AU: Van-Jura,-William-J.
TI: The Role of Questioning in Developing Reading Comprehension in the Social Studies.
PY: 1982
JN: Journal-of-Reading; v26 n3 p214-16 Dec 1982
AV: Reprint: UMI
DE: Secondary-Education; Teaching-Methods
DE: *Content-Area-Reading; *Questioning-Techniques; *Reading-Comprehension; *Reading-Instruction; *Social-Studies
AB: Uses the questioning techniques of the Directed Reading-Thinking Activity and the Guide-O-Rama to enhance social studies students' reading comprehension. (AEA)

AN: EJ294174
AU: Wade,-Suzanne-E.
TI: A Synthesis of the Research for Improving Reading in the Social Studies.
PY: 1983
JN: Review-of-Educational-Research; v53 n4 p461-97 Win 1983
AV: UMI
DE: Aptitude-Treatment-Interaction; Reading-Research; Secondary-Education; Teaching-Methods
DE: *Achievement-Gains; *Content-Area-Reading; *Reading-Improvement; *Social-Studies; *Study-Skills; *Teacher-Role
AB: This review found that providing reading and study-skill instruction in the social studies curriculum can raise achievement scores in both reading and social studies to higher levels than what pupils would achieve without instruction. In those treatments that were successful, teachers played an important role. (Author/PN)

^Z

GETTING COPIES OF THE ITEMS DESCRIBED IN THE ERIC DATABASE:

The items described in the ERIC database have either an "ED" or an "EJ" number in the first field. **About 98% of the ED items can be found in the ERIC Microfiche Collection.** The ERIC Document Reproduction Service (EDRS) in Alexandria, Virginia can produce either microfiche or paper copies of these documents for you. Check the accompanying list of **ERIC Price Codes** for their current prices.

Alternatively, you may prefer to consult the ERIC Microfiche Collection yourself before choosing documents to copy. Over 600 libraries in the United States subscribe to this collection. To find out which libraries near you have it, you are welcome to call the ERIC Clearinghouse on Reading and Communication Skills at (812) 855-5847. Most such libraries have equipment on site for inexpensive production of paper copies from the fiche.

For those few ED-numbered items not found in the Microfiche Collection, check the availability (AV) field of the citation to get information about the author, publisher, or other distributor. p169X

Items with an EJ number in the first field of the citation are journal articles. Due to copyright restrictions, ERIC cannot provide copies of these articles. Most large college or university libraries subscribe to the journals in which these articles were published, and the general public can read or copy the articles from their collections. Should you want copies of articles which appeared in journals not owned by your nearest university library, arrangements usually can be made via interlibrary loan; there frequently is a nominal charge for this, which is set by the lending library. If you are a faculty member, staff member, or student at the university, just ask at your library's reference desk.

For all other categories of users, most universities cannot provide interlibrary services. However, public libraries---which are there to serve all area residents---typically are hooked into statewide lending networks designed to ensure that all state residents have access to materials of interest. Ask your local public librarian about interlibrary loan policies, charges, etc.

There are also two professional reprint services which have obtained permission from some journals to sell article copies. These are University Microfilms International (Article Clearinghouse, 300 North Zeeb Road, Ann Arbor, Michigan 48106---(800) 732-0616), and the Institute for Scientific Information (Original Article Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104---(800) 523-1850). At the time of this publication, UMI charged $10.75 per article regardless of length, and ISI charged $9.50 for the first ten pages, plus $2.00 for each additional ten pages or fraction thereof. However, please check with them for current prices before ordering.

ERIC Price Codes

PAPER COPY /HARD COPY

PRICE CODE	PAGINATION	PRICE
PC 01	1- 25	$ 2.03
PC 02	26- 50	4.06
PC 03	51- 75	6.09
PC 04	76- 100	8.12
PC 05	101- 125	10.15
PC 06	126- 150	12.18
PC 07	151- 175	14.21
PC 08	176- 200	16.24
PC 09	201- 225	18.27
PC 10	226- 250	20.30
PC 11	251- 275	22.33
PC 12	276- 300	24.36
PC 13	301- 325	26.39
PC 14	326- 350	28.42
PC 15	351- 375	30.45
PC 16	376- 400	32.48
PC 17	401- 425	34.51
PC 18	426- 450	36.54
PC 19	451- 475	38.57
PC 20	476- 500	40.60
PC 21	501- 525	42.63
PC 22	526- 550	44.66
PC 23	551- 575	46.69
PC 24	576- 600	48.72
PC 25	601- 625	50.75
PC 26	626- 650	52.78
PC 27	651- 675	54.81
PC 28	676- 700	56.84
PC 29	701- 725	58.87
PC 30	726- 750	60.90
PC 31	751- 775	62.93
PC 32	776- 800	64.96
PC 33	801- 825	66.99
PC 34	826- 850	69.02
PC 35	851- 875	71.05
PC 36	876- 900	73.08
PC 37	901- 925	75.11
PC 38	926- 950	77.14
PC 39	951- 975	79.17
PC 40	976-1,000	81.20

ADD 2.03 FOR EACH ADDITIONAL 25 PAGES,
OR FRACTION THEREOF

MICROFICHE

PRICE CODE	PAGINATION	NO. OF FICHE	PRICE
MF 01	1- 480	1-5	$ .86
MF 02	481- 576	6	1.03
MF 03	577- 672	7	1.20
MF 04	673- 768	8	1.37
MF 05	769- 864	9	1.54
MF 06	865- 960	10	1.71
MF 07	961-1,056	11	1.88
MF 08	1,057-1,152	12	2.05
MF 09	1,153-1,248	13	2.22
MF 10	1,249-1,344	14	2.39
MF 11	1,345-1,440	15	2.56
MF 12	1,441-1,536	16	2.73
MF 13	1,537-1,632	17	2.90
MF 14	1,633-1,728	18	3.07
MF 15	1,729-1,824	19	3.24

ADD $0.17 FOR EACH ADDITIONAL MICROFICHE
(1-96 PAGES)

HOW TO ORDER ERIC DOCUMENTS

EDRS **ERIC**® **DOCUMENT REPRODUCTION SERVICE**

7420 FULLERTON ROAD, SUITE 110
SPRINGFIELD, VA 22153-2852

OPERATED BY

CINCINNATI BELL INFORMATION SYSTEMS (CBIS) FEDERAL
800-443-3742 703-440-1400

IMPORTANT INSTRUCTIONS TO COMPLETE THIS ORDER FORM

- Order by 6 digit ED number
- Enter unit price
- Specify either Microfiche (MF) or Paper Copy (PC)
- Include shipping charges

ED NUMBER	NO. OF PAGES	NO. OF COPIES MF	NO. OF COPIES PC	UNIT PRICE	TOTAL UNIT COST
TOTAL NO. OF PAGES				SUBTOTAL	
UNIT PRICE SCHEDULE				RESIDENTS OF VA, MD AND DC - ADD APPLICABLE SALES TAX	
				SHIPPING CHARGES	
				TOTAL COST	

MICROFICHE (MF)

NUMBER FICHE EACH ED #	PRICE CODE	Price
1 to 5 (up to 480 pages)	MF01	$1.15
Each additional microfiche (additional 96 pages)		$ .25

PAPER COPY (PC)

NUMBER PAGES EACH ED #	PRICE CODE	Price
1 to 25	PC01	$3.12
Each additional 25 pages		$3.12

CHARTS FOR DETERMINING SHIPPING CHARGES

U.S. POSTAL SERVICE		1st CLASS POSTAGE FOR			MICROFICHE ONLY	
1-7 Microfiche ONLY $0.29	8-19 Microfiche ONLY $0.52	20-30 Microfiche ONLY $0.75	31-42 Microfiche ONLY $0.98	43-54 Microfiche ONLY $1.21	55-67 Microfiche ONLY $1.44	68-80 Microfiche ONLY $1.67

UNITED PARCEL SERVICE CHARGES FOR CONTINENTAL U.S. SHIPMENTS ONLY*
*UPS will not deliver to a P.O. Box Number. A Street Address must be provided.

1 lb. 81-160 MF or 1-75 PC PAGES Not to Exceed $2.79	2 lbs. 161-330 MF or 76-150 PC PAGES Not to Exceed $3.30	3 lbs. 331-500 MF or 151-225 PC PAGES Not to Exceed $3.74	4 lbs. 501-670 MF or 226-300 PC PAGES Not to Exceed $4.09	5 lbs. 671-840 MF or 301-375 PC PAGES Not to Exceed $4.31	6 lbs. 841-1010 MF or 376-450 PC PAGES Not to Exceed $4.53	7 lbs. 1011-1180 MF or 451-525 PC PAGES Not to Exceed $4.77	8 to 10 lbs. 1181-1690 MF 526-750 PC PAGES Not to Exceed $5.17-$5.94

NOTE—Orders for 81 or more microfiche and all orders for paper copies (PC) will be shipped via United Parcel Service unless otherwise instructed.

SEE REVERSE FOR EXPEDITED DOCUMENT DELIVERY SERVICE

PAYMENTS: You may pay by

1. Enclosing CHECK or MONEY ORDER with your order. Foreign customer checks must be drawn on a U.S. bank.
2. Charge to a MasterCard or VISA account. Enter account number, card expiration date and signature. (EDRS also accepts telephone orders when charged to a MasterCard or VISA account.)
3. PURCHASE ORDERS: U.S. customers may enclose an authorized original purchase order. No purchase orders are accepted from foreign customers.
4. Charge to a DEPOSIT ACCOUNT. Enter deposit account number and sign order form.

PLEASE INDICATE METHOD OF PAYMENT AND ENTER REQUIRED INFORMATION.

VISA

WE HONOR BOTH

MasterCard

☐ Check or Money Order ☐ Purchase Order (ATTACH ORIGINAL PURCHASE ORDER)

☐ MasterCard ☐ VISA

Account Number _____ Expiration Date _____

Signature _____

☐ Deposit Account Number _____

Signature _____

ENTER "SHIP TO" ADDRESS _____

_____

_____

CALL TOLL FREE 1-800-443-ERIC (3742) 24 HOURS A DAY - 7 DAYS A WEEK
ALLOW 5 WORKING DAYS FOR EDRS TO PROCESS AND SHIP YOUR ORDER

EXPEDITED DOCUMENT DELIVERY

Expedited delivery of ERIC documents is available.

- Call in your order 24 hours a day toll free 1-800-443-ERIC (3742).
- Fax your order 24 hours a day 703-440-1408.

Your order will be shipped to you, by the method you select, on the fifth (5th) working day after receipt.

To insure expedited receipt, request shipment by either:

- USPS Express Mail
- Federal Express
- UPS Next Day Air
- FAX transmission of your document

Shipping and FAX transmission charges will be added to the cost of the document(s) by EDRS.

These requesting and delivery methods are in addition to the 3-day delivery services available in response to orders received through the use of on-line data base services.

STANDING ORDERS SUBSCRIPTION ACCOUNTS

Subscription orders for documents in the monthly issue of **Resources in Education** (RIE) are available on microfiche from EDRS. The microfiche are furnished on a diazo film base and without envelopes at $0.111 per microfiche. If you prefer a silver halide film base, the cost is $0.225 per microfiche and each microfiche is inserted into a protective envelope. SHIPPING CHARGES ARE EXTRA. A Standing Order Account may be opened by depositing $1,500.00 or submitting an executed purchase order. The cost of each issue and shipping will be charged against the account. A monthly statement of the account will be furnished.

BACK COLLECTIONS

Back collections of documents in all issues of **Resources in Education** (RIE) since 1966 are available on microfiche at a unit price of $0.131 per microfiche. The collections from 1966 through 1985 are furnished on a vesicular film base and without envelopes. Since 1986, collections are furnished on a diazo film base without envelopes. SHIPPING CHARGES ARE EXTRA. For pricing information, write or call toll free 1-800-443-ERIC (3742).

GENERAL INFORMATION

1. PRICE LIST
The prices set forth herein may be changed without notice; however, any price change is subject to the approval of the Contracting Officer/USED/Office of Educational Research and Improvement/Contracts and Grants Management Division.

2. PAYMENT
The prices set forth herein do not include any sales, use, excise, or similar taxes that may apply to the sale of microfiche or paper copy to the Customer. The cost of such taxes, if any, shall be borne by the Customer.

Payment shall be made net thirty (30) days from date of invoice. Payment shall be without expense to CBIS Federal.

3. REPRODUCTION
Express permission to reproduce a copyrighted document provided hereunder must be obtained from the copyright holder noted on the title page of such copyrighted document.

4. CONTINGENCIES
CBIS Federal shall not be liable to Customer or any other person for any failure or delay in the performance of any obligation if such failure or delay (a) is due to events beyond the control of CBIS Federal including, but not limited to, fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, strikes, lockouts, labor disputes, labor shortages, work stoppages, transportation embargoes or delays, failure or shortage of materials, supplies or machinery, acts of God, or acts or regulations or priorities of the federal, state, or local governments; (b) is due to failures of performances of subcontractors beyond CBIS Federal's control and without negligence on the part of CBIS Federal; or (c) is due to erroneous or incomplete information furnished by Customer.

5. LIABILITY
CBIS Federal's liability, if any, arising hereunder shall not exceed restitution of charges.

In no event shall CBIS Federal be liable for special, consequential, or liquidated damages arising from the provision of services hereunder.

6. WARRANTY
CBIS FEDERAL MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

7. QUALITY
CBIS Federal will replace products returned because of reproduction defects or incompleteness. The quality of the input document is not the responsibility of CBIS Federal. Best available copy will be supplied.

8. CHANGES
No waiver, alteration, or modification of any of the provisions hereof shall be binding unless in writing and signed by an officer of CBIS Federal.

9. DEFAULT AND WAIVER
a. If customer fails with respect to this or any other agreement with CBIS Federal to pay any invoice when due or to accept any shipment as ordered, CBIS Federal may, without prejudice to other remedies, defer any further shipments until the default is corrected, or may cancel the order.

b. No course of conduct nor any delay of CBIS Federal in exercising any right hereunder shall waive any rights of CBIS Federal or modify this Agreement.

10. GOVERNING LAW
This Agreement shall be construed to be between merchants. Any questions concerning its validity, construction, or performance shall be governed by the laws of the State of Virginia.

11. DEPOSIT ACCOUNTS
Customers who have a continuing need for ERIC documents may open a Deposit Account by depositing a minimum of $300.00. Once a Deposit Account is opened, ERIC documents will be sent upon request, and the account charged for the actual cost and postage. A monthly statement of the account will be furnished.

12. PAPER COPY (PC)
A paper copy (PC) is a xerographic reproduction, on paper, of the original document. Each paper copy has a Velum Bristol cover to identify and protect the document.

13. FOREIGN POSTAGE
Postage for all countries other than the United States is based on the International Postage Rates in effect at the time the order is shipped. To determine postage, allow 160 microfiche or 75 (PC) pages per pound. Customers must specify the exact classification of mail desired, and include the postage for that classification with their order. Payment must be in United States funds.

BEST COPY AVAILABLE